



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,403	02/27/2002	Keiichi Nakada	381AS/50981	7379

7590 10/02/2002

Crowell & Moring LLP  
The Evenson, McKeown, Edwards & Lenahan  
Intellectual Property Law Gr.  
1001 Pennsylvania Avenue, N.W.  
Washington, DC 20004-2595

EXAMINER

DICKENS, CHARLENE

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/083,403

Applicant(s)

NAKADA et al.

Examiner

Dickens

Group Art Unit

2855

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-11 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-10 is/are rejected.
- ☒ Claim(s) 11 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☒ The drawing(s) filed on 2/27/02 is/are objected to by the Examiner
- ☒ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☒ All ☐ Some\* ☐ None of the:
  - ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2
- ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: "39", "301", and "302".

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "18" and "34". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

5. Claim 11 is objected to under 37 CFR 1.75© as being in improper form because the claim is not written in alternative

format. See MPEP § 608.01(n). Accordingly, the claim 11 not been further treated on the merits. Do not assume allowability. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear if applicant is intending to claim "a main passage" and "a means" in claim 1 (lack of positive recitations). Next, it is not clear what structure is referred to by the recitation "its" in claim 4.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (US Pat 5,892,146) in view of Igarashi et al. (US Pat 5,631,415). As best understood, Kobayashi et al. discloses a flow rate measuring device comprising: a sub-passage 10 installed in a main passage 20

through which a fluid flows; and a detection element 52 installed in the sub-passage and capable of measuring a flow rate of a gas flowing in a forward direction 23 and a flow rate of a gas flowing in a backward direction 24; wherein the sub-passage has an outlet opening 12 in a radial direction of the main passage and a bent portion at least upstream of the detection element; wherein capability is provided near the outlet of the sub-passage to introduce the backward flow of the main passage into the sub-passage through the outlet (col. 2, lines 1-6); wherein introduction of the backward flow into the sub-passage through the outlet by a dynamic pressure generated by the backward flow; and wherein the sub-passage has the bent portion between the outlet and the detection element. However, Kobayashi et al. does not specifically disclose a sub-passage having a structure of a stepped portion formed of various configurations. Igarashi et al. discloses a sub-passage having a structure of a stepped portion formed of various configurations (Figs. 1, 3, 4, 6, 7, 9-13, 15-18, 20, 22, 24, 25) for the purpose of providing an air flow rate measuring device in which particular configurations develops the highest flow velocity in central portion of the main air passage. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a sub-passage having a structure of a stepped portion formed of various configurations in Kobayashi et al. as taught by Igarashi

et al. for the purpose of providing an air flow rate measuring device in which particular configurations develops the highest flow velocity in central portion of the main air passage.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nagasaka et al., Sawada et al., Clowater et al., Igarashi et al. ('321), Zurek et al., Sawada et al. ('822), Hecht et al., Mueller et al., and Kondo et al. all disclose sub-passages which reduce the amount of backflow.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dickens whose telephone number is (703) 305-7047.



cd/dickens  
September 25, 2002



William Oen  
Primary Examiner